Instruction Manual

RNC

Wireless NFC Programmable Keypad

2024
Version 2.0.0

UK CA

For more information relating to the RNC, see the Wireless Module Application Sheet, and Wireless Device LED Diagnostics.

For programming a wireless system, including the device in this manual, see the Wireless Module Programming Guide

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1 What is the RNC?

- The RNC is a wireless battery-powered keypad for transmitting Rako commands to wireless receivers such as the RMT-500 or RDA-800.
- Available in a wide range of button configurations to control lights, blinds, and audio, the RNC provides a versatile solution to suit the needs of all room sizes.
- The RNC is programmed using Rasoft Pro software in conjunction with a RAMPI or HUB via NFC.
- Can control multiple Rooms and Channels.

2 Programming the RNC

2.1 Addressing RNC (HUB)

Unlike the RCM, the RNC must be programmed using Rasoft Pro software, a RAMPI or a HUB is required to do this. Similar to the RAMPI, the HUB has built-in NFC programming functionality, which enables programming RNCs. If the HUB has not yet been set up, see A1.2 HUB.

- To begin the setup process, ensure you are connected to the HUB in the communication Devices in Rasoft Pro, and that the HUB has been configured.

- Place the RNC on the top, middle section of the HUB.

- When the Device is correctly positioned, a green LED will show on the HUB, and a window will pop up in Rasoft Pro.

- Give the Device a suitable name so that it is identifiable in the software.

- Select the local Room for the Device. After the initial setup, the RNC will behave like an RCM with dip switches set to this Room.

NB

It is important to set the Room at this stage. If "Assign later" is selected, then the RNC will not be programmed and will be added as a virtual Device

- Select Finish on the next page to complete the setup. The HUB will need to upload to the RNC at this stage.

2.2 Addressing NFC Keypads (RAMPI)

Unlike the RCM, the RNC must be programmed using Rasoft Pro software, a RAMPI or a HUB is required to do this. First, ensure that the RAMPI is connected to Rasoft Pro in the communication window (see A1.1 RAMPI).

- To begin the setup process, place the RAMPI on the RNC and ensure no metallic cover plates are fixed to the Device.

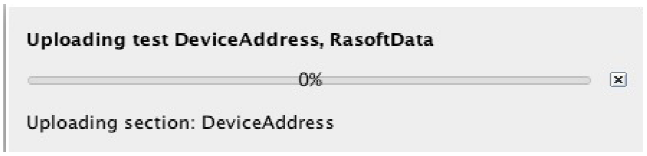
- When the Device is correctly positioned, a green LED will flash in the RAMPI, and a window will pop up in Rasoft Pro.

- Give the Device a suitable name so that it is identifiable in the software.

- Select the local Room for the Device. After the initial setup, the RNC will behave like an RCM with dip switches set to this Room.

NB
It is important to set the Room at this stage. If "Assign later" is selected, then the RNC will not be programmed and will be added as a virtual Device

- Select Finish on the next page to complete the setup. The RAMPI will need to upload to the RNC at this stage.



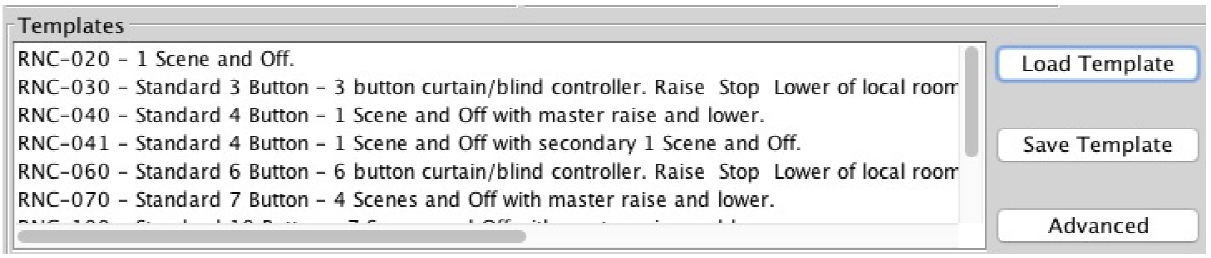
2.3 Configuring The RNC

Once set up in Rasoft Pro, the RNC will use default Rooms.

The button mapping screen for the RNC can be accessed by selecting it in the Device list; this will open the Device Editor for the RNC Device.

To apply a template to an RNC:

- In the button mapping tab of the Device editor, scroll to the bottom to view the templates menu.



The templates section will vary depending on the RNC

- Select the relevant template and click Load Template. This will open a pop-up box; select yes to overwrite the mapping with the template.



- The mappings for this template will now appear in the left tile of the Device editor.

- Click "save for upload" at the bottom of the page to upload these settings onto the RNC.

- At this point, a progress bar will appear on the screen. Touch the RNC on the HUB to upload the new settings.

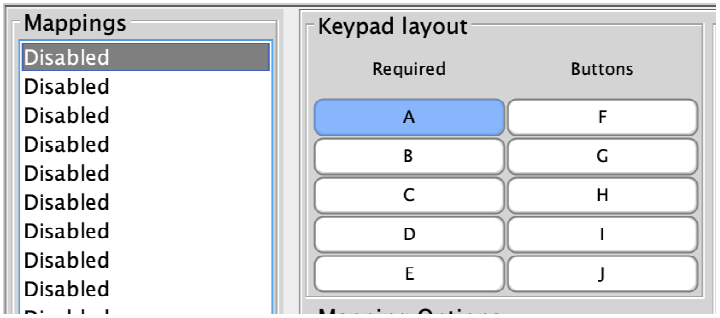
2.3.1 Button Layout

The RNC has labelled inputs that represent the buttons on the Keypad. The inputs are as follows:

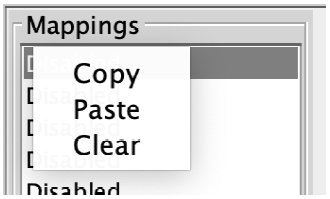
2.3.2 The Mapping Section

All programmed inputs for the Device must first have a mapping. The purpose of a mapping is to program a button to perform a specific command. Each input has its own letter to represent its input; the RNC has up to 10.

New mappings can be created by selecting a disabled field and selecting the corresponding input letter in the next column:



Active mappings can be copied or pasted into disabled mappings; this is typically used when re-using similar functions of an existing mapping to save time, such as a toggle function.



Mapping right-click options

NB
Ensure only a single letter is used for each mapping, otherwise, the mapping will not function unless all inputs are pressed at the same time.

2.3.3 Keypad layout

The inputs for the mappings are selected in the Keypad layout section, as well as additional input options:

Function	Description
Send Stop On Release	When the button is released, a 'Stop' command will be triggered.
Trigger on press	Trigger the output command when the button is pressed.
Trigger on release	Trigger the output command when the button is released.

2.3.4 Button action

The output actions of the buttons inputs are set up in the button action section, the following options are available:

Function	Description
Room	The Room number of the output command.
Channel	The Channel number of the output command can be All Channels or a single Channel.
Disable map	When enabled, the button input will have no output command.
Scene	If a Scene is being triggered, select a Scene between 1-16.

Fade-Up/Fade-Down	Commonly used to manually dim lighting up and down, as well as the opening/closing of blinds. NB 'Send Stop on Release' should also be checked when using this option.
Motor Stop	Used to stop 3rd party motors that are configured within the HUB.
Ident	This option is not recommended, as the command will make a load flash momentarily and provides no practical function for daily use.
Toggle	The Toggle function will alternate between two commands, either a Level command and Off, or a Scene command and Off. NB Do not map more than one Toggle to a single button on the inputs; this will result in sporadic switching due to toggles getting out of sync.
Level	Sets the lighting Level to a percentage of brightness between 0-100%.
Tunable White	Set the temperature output.
Macro	Trigger an internal Macro on the Device; this is not the same as triggering a Macro on a HUB. NB Macros can be created on the 'Macro' tab above the button configuration.

For further information on how the RNC is programmed in the context of a complete system, see the Wireless Module Setup Guide.

3 Button Configurations

The RNC is available in a wide range of button layouts to suit each application. Below are the standard button layouts available.

Layout	Description	Layout	Description
RNC-070	4 Scenes with Raise and Lower.	RNC-020	Scene 1 and Off
RNC-100	7 Scenes with Raise and Lower.	RNC-030	Open, stop, and close. Used for blind control.
RNC-060	Dual blind control, open, stop, and close. Used for blind control. The set room number will increment the right column by 1.	RNC-041	Dual room Scene 1 and Off. The set room number will increment the right column by 1.
RNC-071	8 blind selector, with open and close. Press buttons 1-4 to select a blind channel, open and close will control the last button pressed. To control blind channels 5-8, hold down 'ALL' while selecting the relevant channel button, the open and close will control the last channel pressed.	RNC-040	Scene 1 and off, with raise and lower.

RNC-072	4 Scenes with Scene 1 and Off to control a separate room	RNC-103	Dual Room 4 Scenes and Off to control two rooms on a single control panel.
RNC-101	4 Scenes and Off with raise and lower with integrated blind control.	Custom	Customised button layouts can be made to order to suit specific programming requirements, see Rako Plate Designer for more information.

4. Installation

⚠WARNING

Installation should only be carried out by a competent electrician.

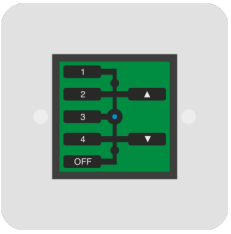
- RNC modules should be mounted in dry areas only.
- Metal backboxes will reduce the transmission distance; to mitigate this, it is recommended to drill out of the backbox and into the wall.
- The RNC is a battery-powered device; it must be accessible for battery replacement.

4.1 Installation - Screwless finish plates (RLF/RLM)

Step 1	*RLF* *RLM*	Screw the grid into the backbox, ensure that the fixing holes for the plate are above the screws, not at the bottom.

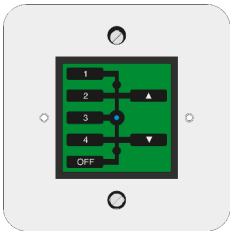
Step 2	*RLF* *RLM*	Remove the battery ‘pull out’ tab on the RNC. Push the RNC into the grid, the outer bezel of the RNC should sit flush with the grid.
Step 3	*RLF* *RLM*	Clip the front cover plate on the grid with a firm push, and ensure that the plate is sitting flush on the wall and is unobstructed.

4.2 Installation - screwed backbox plates (RVF)

Step 1	 *RVF*	Remove the battery ‘pull out’ tab on the RNC. Using the clear clippy provided with the RVF, push the RNC through the flat side of the clear clippy until the RNC bezel is flush with the front.
Step 2	*RVF*	Place the cover plate on top of the clear clippy, and screw the plate and switch into the wall.

4.3 Installation - screwed surface mount plates (RVF)

Step 1	*RVF*	Remove the battery ‘pull out’ tab on the RNC. Push the RNC into the pattress and insert the bolts provided into the plate fixing positions of the RNC. To mount the pattress on a wall, use two wall screws (not included) and fix them to the top and bottom of the pattress.

Step 2	 *RVF*	Clip the white pattress onto the black pattress screwed to the wall. <u>NB</u> A black pattress is also available
Step 3	*RVF*	Place the cover plate over the white pattress and screw the plate to it using the screws provided. Ensure that the plate sits flush in the pattress and nothing is causing obstruction.

5 Initial checks

- Press any button on the RNC, and the blue LED in the centre will illuminate momentarily and go off.
- Ensure every button on the switch can be pressed without obstruction.
- If there is no blue light when a button is pressed, check that that 'pull out' tab has been removed from the battery terminal.

6 Appendix - LED Diagnostics

Battery	LED Pulses	Description
Healthy battery	One second-long pulse.	When a button is pressed on the RNC, there should be a single pulse on the blue LED.
Low battery or the wrong battery.	Multiple intermittent pulses.	If the RNC has a low battery, the blue LED will flash when a button is pressed, there may also be no LED if the battery is flat.